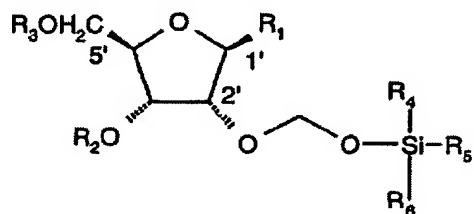


### **Abstract**

The invention provides ribonucleoside derivatives with novel protecting groups and methods for the preparation of such ribonucleoside derivatives. The general formula (I)



of the ribonucleoside derivatives is: wherein R<sub>1</sub> is a base of the purine- or pyrimidine-family or a derivative of such a base or any other residue which serves as a nucleobase surrogate, R<sub>2</sub> is a proton or a substituted derivative of phosphonic acid, R<sub>3</sub> is a proton or a protection-group for the oxygen atom in 5' -position, R<sub>4</sub>, R<sub>5</sub> and R<sub>6</sub> are independently alkyl or aryl or a combination of alkyl and aryl or heteroatom, R<sub>4</sub>, R<sub>5</sub> or R<sub>6</sub> may also be cyclically connected to each other; and wherein at least one of the R<sub>4</sub>, R<sub>5</sub> or R<sub>6</sub> substituents comprises a tertiary C-atom or a heteroatom vicinal to the Si-atom.